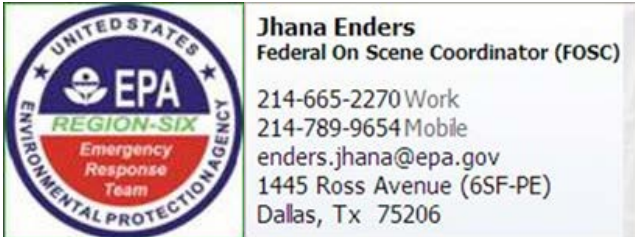


From: [Enders, Jhana](#)
To: [Turner, Philip](#)
Subject: Sampling info
Date: Tuesday, February 14, 2017 11:34:48 AM
Attachments: [image003.png](#)
[image006.png](#)
[image010.png](#)

FYI...



From: Oudejans, Lukas
Sent: Tuesday, February 14, 2017 11:31 AM
To: Enders, Jhana ; Kaelin, Lawrence
Subject: RE: Request for Sampling Info

Jhana,

I see your problem. I stumbled on a 2012 report from an EPA contractor

(https://www3.epa.gov/region10/pdf/sites/mmrf/lh_air_sampling_monitoring_data_report_102612.pdf)

that says that "...**no commercially available sampling or monitoring method can reliably detect phosphine down to the EPA chronic regional screening level (RSL) for industrial workers** 1.3 µg/m³ (0.94 ppbv). As indicated in the approved SAP, neither the OSHA extractive method nor the field instrument can reach that sensitivity. The laboratory reporting limit for the OSHA method as implemented was approximately 12 to 36 µg/m³."

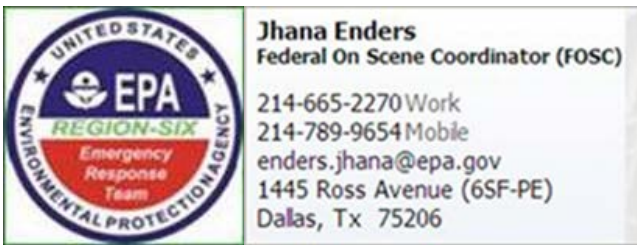
Maybe Larry has some other info that can help you...

Lukas

Lukas Oudejans, Ph.D.

U.S. Environmental Protection Agency
Office of Research and Development
National Homeland Security Research Center
109 T.W. Alexander Dr. (E343-06)
Research Triangle Park, NC 27711
Phone: (919) 541-2973 Fax: (919) 541-0496
www2.epa.gov/homeland-security-research

From: Enders, Jhana
Sent: Tuesday, February 14, 2017 12:07 PM
To: Oudejans, Lukas <Oudejans.Lukas@epa.gov>; Kaelin, Lawrence <Kaelin.Lawrence@epa.gov>
Subject: RE: Request for Sampling Info
mg/m³



From: Oudejans, Lukas

Sent: Tuesday, February 14, 2017 10:51 AM

To: Enders, Jhana <Enders.Jhana@epa.gov>; Kaelin, Lawrence <Kaelin.Lawrence@epa.gov>

Subject: RE: Request for Sampling Info

Jhana,

I don't have direct info on labs that can analyze air samples for phosphine (and their DLs). What is the unit for your 0.023 number?

Lukas

Lukas Oudejans, Ph.D.

U.S. Environmental Protection Agency

Office of Research and Development

National Homeland Security Research Center

109 T.W. Alexander Dr. (E343-06)

Research Triangle Park, NC 27711

Phone: (919) 541-2973 Fax: (919) 541-0496

www2.epa.gov/homeland-security-research

From: Enders, Jhana

Sent: Tuesday, February 14, 2017 11:42 AM

To: Oudejans, Lukas <Oudejans.Lukas@epa.gov>; Kaelin, Lawrence <Kaelin.Lawrence@epa.gov>

Subject: FW: Request for Sampling Info

Do you all know any labs that might be able to get to the attached level for phosphine? So far the best I can do is 0.023. Thanks.

